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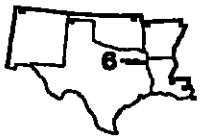

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
SUPERFUND SITE STRATEGY RECOMMENDATION - REGION 06

Site Name: Delta Shipyards CERCLISID#: LAD058475419

Alias Site Names: NA

Address: Industrial Boulevard

City/County or Parish/State/Zip Code: Houma, LA, Terrebonne Parish

Report Type, Date, and Author: Expanded Site Inspection Report by Ecology and Environment, 1996

RECOMMENDATION:

( ) 1. No Further Remedial Action Planned under Superfund (NFRAP)

(X) 2. Further Investigation Needed Under Superfund
( ) PA ( ) HRS
( ) SSI ( ) RA
( ) ESI ( ) RI/FS
(X) Other:
To be performed by: Candidate for EE/CA

Priority: ( ) High ( ) Medium (x) Low

( ) 3. Action Deferred to:
( ) RCRA ( ) NRC

NOTIFY AUTHORITY:

(X) Removal	( ) RCRA	( ) TSCA	( ) CAA		( ) SMCRA
(X) Remedial	( ) State	( ) NPDES	( ) NRC		( ) Resource Trustee:
( ) CERCLA Enforcement	( ) Federal Facility		( ) UIC		( ) SPCC
					( ) Other:
SEND SSSR COPIES TO:	() 6SF-AC	( ) 6WQ-SP	( ) ATSDR		(X) State Agency

DISCUSSION: Delta Shipyards (DS) is an inactive barge cleaning, repairing, and gas freeing operation located on the southern side of Houma, Louisiana. The DS comprised one of nine divisions of Delta Ironworks who owned and operated the 165 acre facility until 1986, when it sold 110 acres of the site to Elevated Boats, Inc (EBI). EBI utilizes some of the property, and leases out the remainder to several other businesses.

Four waste source areas have been identified at the DS. They consist of four unlined surface impoundments which were used to store oily wastes generated from the barge cleaning operations. The four impoundments are adjacent to each other in a remote area of the site and comprise a surface area of approximately 290,000 sq. feet. Soil/sediment samples collected from the pits indicate elevated levels of various polynuclear aromatic hydrocarbon (PAH) compounds consistent with the types of wastes generated during barge cleaning. The DS is located in an industrial park which is accessible to the public, however the site has little or no recreational value.

The overland surface water pathway is the only pathway of concern at the DS. Lack of ground water use, remote location, and minimal volatile organic contaminant (VOC) emissions effectively ruled out the ground water, soil, and air contaminant pathways. Sediment samples collected from a drainage ditch surrounding the impoundments has confirmed that historic releases of hazardous constituents has occurred. Surface water overflow from the pits would follow the ditch .3 miles before reaching the probable point of entry (PPE) at Bayou La Carpe. Bayou La Carpe flows approximately 4000 feet south until reaching the Houma Navigational Canal. Extensive sampling was done during the ESI of sediments in both Bayou La Carpe and the Navigation Canal. Although there were several samples collected containing elevated levels of barium, there was only one sediment sample collected from Bayou La Carpe which exceeded 3x background for PAH's. The sample location for the PAH sample was upstream of the DS site. This could be explained in part by tidal influences, however if the sample were used for HRS ranking purposes there would be attribution problems. Given the large body of samples which have been collected during both the SI and the ESI, coupled with the fact that there is only one PAH sample which might qualify as a release sample, this site does not appear to be an NPL caliber site.

Although the site does not meet NPL criteria, the oily wastes in the impoundments does need to be addressed. The pits do not constitute an imminent and substantial endangerment, but could be addressed in a non time-critical fashion, such as an Engineering Evaluation/Cost Analysis (EE/CA) to support a non time critical removal action.

APPROVALS:

Report Reviewed by:William Rhotenberry (Site Assessment Manager 6SF-RA)	Signature:	Date: 9/4/98
Disposition Recommended by:Susan Webster (Team Leader 6SF-RA)	Signature:	Date: 11/12/99
Disposition Recommended by:Ragan Broyles (Deputy Branch Chief 6SF-RR)	Signature:	Date: 11/12/99

SITE INSPECTION PRIORITIZATION REPORT
AND PRESCORE PACKAGE
DELTA SHIPYARD
PHASE III
HOUMA, LOUISIANA
EPA ID NO.: LAD058475419

Prepared for:

U.S. Environmental Protection Agency
Region VI
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Contract No.: 68-W9-0015
Work Assignment: 27-6JZZ
Document Control No.: 4603-27-0229

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December 1994

Mike Griffith

INTRODUCTION

Roy F. Weston, Inc. (WESTON®) is pleased to present this report, which summarizes the results of the file review and PREscore package completed for the Delta Shipyard (DS) site (LAD058475419) in Houma, Terrebonne Parish, Louisiana. WESTON was tasked by the U.S. Environmental Protection Agency Region VI (EPA VI) to review existing file information and gather additional information (Phase III activities) that would more accurately determine a site score for the DS site. This effort is part of the Site Inspection Prioritization (SIP) Work Assignment for various sites in EPA VI. The PREscore package for the site is attached as part of the report.

EPA established the SIP process to help assess known or potential hazardous waste sites, address first those sites that pose the greatest threat to human health and the environment, and standardize the criteria by which sites are evaluated within the Superfund program. Through the SIP, EPA reviews sites that generally have had a complete Site Inspection (SI) performed on them but that have not received a final decision regarding the need for further investigation or remediation. The outcome of the SIP indicates whether the available information for the site meets a minimum standard of evaluation reflecting the requirements of the revised Hazard Ranking System (HRS). The SIP process better enables EPA to determine if a site is likely to receive a score of 28.5 or above under the HRS, potentially making it a candidate for placement on the National Priorities List (NPL). If it is determined that the site will not score above the NPL threshold of 28.5, EPA is in a position to declare that the site evaluation, under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), has been accomplished.

SITE BACKGROUND INFORMATION

The DS site is located in Houma, Terrebonne Parish, Louisiana. The geographic coordinates of the site are approximately latitude 29°34'2" north and longitude 90°42'18" west. A Site Location Map is provided in Attachment 1 as Figure 1, and a Site Area Map is provided in Attachment 1 as Figure 2. The site can be reached by traveling south on Highway 90 into Houma until reaching East Main Street. Travel east on Main Street for approximately 1.8 miles and turn south on Howard Avenue. From Howard Avenue, travel south for approximately 2.2 miles until reaching Industrial Boulevard. Turn east and travel 0.5 mile. The site is on the south side of Industrial Boulevard.

WESTON contacted Lynn Dean of Elevated Boats Incorporated (EBI) (8404 Colonel Drive, Shelmett, Louisiana 70043), the present owner of the site, in May 1994. Kenneth Serigne, Department Manager for the EBI property, signed an EPA Access Agreement on 15 June 1994, allowing WESTON access to the DS site. Mr. Dean was reached at (504) 278-4200. Mr. Serigne was reached at (504) 868-9655. WESTON met with Mr. Serigne during the site reconnaissance and site sampling mission.

WESTON completed the SIP site reconnaissance on 12 July 1994. The 40-acre site is part of a large industrial park covering approximately 165 acres in southeastern Houma, Louisiana. The industrial park occupies land between a boat slip and Bayou La Carpe. Bayou La Carpe provides access to the Gulf of Mexico through the Houma Intercoastal Waterway. EBI purchased 110 acres of the park in 1985 and currently leases part of it to other industries. The site is surrounded by Gemoco to the north, Christie Industries to the southeast, and Offshore Diving, Salvaging, and Blasting Company to the west. EBI maintains an active fabrication plant/office building on-site.

DS owned the site prior to EBI; the year operations began at the site is unknown. DS consisted of a barge gas-freeing operation and a cleaning and repairing facility for small cargo vessels, fishing vessels, and oil barges. The gas-freeing operation was required because the vessels had to be certified vapor free by the U.S. Coast Guard before repair work could commence. As part of the gas-freeing process, the vessels were steam-cleaned and the oily wastes were removed. The generated oils and wastewater were sent through a separation process after which the waste oil was recovered and sold. Wastes were stored in surface impoundments on-site. Two small waste pits, located approximately 100 feet east of the fabrication building, were sampled and closed in 1984 under the supervision of the Louisiana Department of Environment Quality (LDEQ) Hazardous Waste Division. Two monitoring wells are reportedly located around the closed pits; however, during the site reconnaissance, only one could be located. The pits were reportedly used to dispose of waste oil and oil field drilling material. A Site Plan Map is provided in Attachment 1 as Figure 3.

The DS site contains old gas-stripping equipment (i.e., storage tanks, separator, boiler) left behind from the former operation. The two closed waste oil surface impoundments are now a parking lot used by EBI employees. Four larger pits are located approximately 800 feet south of the fabrication building and are surrounded by dense vegetation. One pit is located west and the other three are located east of Plant Shell Road. According to a Wink Engineering sampling report in 1985, the pit west of the road is actually three pits in series that have been covered over with fill material. For the purposes of this Phase III report, these pits are considered one single pit. The three pits east of the road are exposed and covered with a crusty black substance. At the time of the site reconnaissance, rainwater containing an oily sheen was pooled on the surface of the pits.

The groundwater, soil, and surface water migration pathways are of concern at the site because of possible hazardous constituents being released to these pathways.

Previous investigations at the DS site include the following:

- A Site Inspection (SI) by Ecology & Environment, Inc. on 11 March 1981.
- A SI by The Earth Technology Corporation on 12 September 1984.
- A sampling report by Wink Engineering in July 1985.

Phase III DATA

Additional site information resulting from Phase III SIP efforts (information/data gathering/site reconnaissance/sampling mission) is described below.

Identification and Location of Groundwater Wells

WESTON used file information from EPA VI and contacted the Louisiana Department of Transportation (LDOT) for information on water wells within a 1-mile radius of the site. LDOT files indicate several monitoring wells and 1 rig supply well are located within a 1-mile radius of the site. The rig supply well is plugged and abandoned. The closest wells are three monitoring wells located 2,000 feet to the northeast of the site. They are owned by Torch Energy and are completed in the Mississippi River Alluvial Aquifer Confining Unit. They were drilled in 1990 and range from 7 to 10 feet deep. A Water Well Location Map is provided in Attachment 1 as Figure 4.

Determination of Surface Water Intakes Within the Target Distance Limit

WESTON contacted Bryan Sampey, Plant Manager at the Houma District 3 Water Plant, to determine surface water intakes within the 15-mile stream-flow Target Distance Limit (TDL). The plant is located near the confluence of the Houma Navigational Canal and Bayou Black. Mr. Sampey stated that the Houma plant takes its water from the Houma Navigational Canal. The canal is tidally influenced and saltwater intrusion is a problem. The plant uses Bayou Black as a secondary source of water when saltwater intrusion occurs in the canal. According to Mr. Sampey, the plant serves an estimated 30,000 people. The plant lies 2.55 stream miles upstream of the PPE; however, the canal is tidally influenced and therefore contaminants from the DS site could possibly migrate towards the water plant.

Identification and Location of Wetlands and Sensitive Environments

Surface water runoff draining from the site flows into Bayou La Carpe. Bayou La Carpe enters the Houma Navigational Canal just south of the site. According to the Houma, Louisiana, 7.5-minute wetlands map, the Houma Navigational Canal is bordered by extensive wetland areas. A Surface Water Pathway Map is provided in Attachment 1 as Figure 5.

Site Accessibility

Based on the WESTON Phase III site reconnaissance and sampling mission, the site is fairly accessible to the general public by both vehicle and foot. However, the site is located in an industrial park and the land has little or no recreational value.

Determination of Population by Distance Rings

During the Phase III effort, WESTON determined the population within target distances using the Geographical Exposure Modeling System (GEMS) Database. According to GEMS, 15

people live within the 0.25- to 0.5-mile radius, 3,578 people live within the 0.5- to 1-mile radius, and 36,895 live within the 1- to 4-mile radius of the site.

Identification of Fisheries

WESTON contacted Gerald Adkins of the Louisiana Department of Wildlife and Fisheries (LDWF) to determine if fisheries existed within the 15-mile TDL. Bayou La Carpe and the Houma Navigational Canal are considered limited fisheries because of problems with saltwater intrusion and marine traffic. Adkins stated that at certain times of the year, some freshwater catfish and crab fishing takes place.

Sampling Information

In general accordance with the objectives of the SIP, WESTON implemented a sampling strategy primarily aimed at documenting the presence of hazardous substances at the DS site. WESTON collected soil and sediment samples at the site on 22 August 1994. WESTON completed the sampling activities in general accordance with the site-specific Task Work Plan and Health and Safety Plan. All samples collected during the SIP were shipped to EPA-designated laboratories by Federal Express Priority Overnight Service. Samples requiring organic analyses were sent to Keystone Lab, Houston, Texas, and samples requiring inorganic analyses were sent to Silver Valley Labs, Inc., Kellog, Indiana. CLP data package excerpts are provided in Attachment 4. The sampling activities and analytical results associated with the waste source characterization are summarized in this section of the report.

WESTON collected seven sediment samples (SED-1 through SED-7) and three soil samples (SS-1 through SS-3) in an effort to document the presence and migration of hazardous substances associated with the potential hazardous waste source areas (HWSAs) at the site. Sample locations are shown in Attachment 1 as Figure 6. SIP soil/sediment sample locations, descriptions, and rationales are summarized in Attachment 3 as Table 1.

The soil and sediment samples were analyzed for the following parameters:

- Volatile organic compounds (VOCs),
- Base, neutral, and acid extractable compounds (BNAs),
- Pesticide and polychlorinated biphenyls (PCBs), and
- Inorganic constituents and cyanide.

HRS SCORING

Preliminary PAscore

Using the data provided by EPA VI from Resource Conservation and Recovery Act (RCRA) and CERCLA files, WESTON developed a preliminary HRS score for the site using PAscore

(Version 2.0). The site received a PAscore of significant value to warrant evaluation of the site using PREscore. PREscore was used to develop and document the HRS score for the site in more detail.

PREscore

Factors that had the greatest influence on the Phase III PREscore evaluation are identified in the following sections. Conclusions concerning the site HRS score are presented following the discussion of factors affecting the PREscore. The Phase III PREscore package for the site is provided as Attachment 2.

WASTE SOURCE CHARACTERISTICS

The laboratory analytical results for soil samples SS-2 and SS-3 and sediment samples SED-1, SED-2, and SED-3 were collected from the pits during the SIP and can be used to characterize the potential HWSAs.

Four waste source areas were identified in the file review and site reconnaissance. They consist of four pits used to store waste oils from the DS ship cleaning and repair operation. Pit 4 is actually three pits according to a Wink Engineering report; however, the pits are aligned in series, covered over, and vegetated. For purposes of the Phase III report, they are designated together as Pit 4. The other three pits (1, 2, and 3) are exposed and covered by a black crusty substance. Pits 1, 2, and 3 are elevated and surrounded by a 3- to 6-foot berm. The four pits together have an approximated surface area of 294,000 square feet. The waste characteristics of the site were assessed for the groundwater, soil, and surface water exposure pathways.

Samples collected from the pits indicate the presence of volatiles, semivolatile organics, pesticides, and metals. Sediment analytical results reported at concentrations exceeding three times background concentrations are summarized in Attachment 3, Tables 2 and 3. Soil analytical results reported at concentrations three times background concentrations are summarized in Attachment 3, Table 4. The CLP data summary package is provided as Attachment 4 and photodocumentation is provided as Attachment 5.

Groundwater Pathway

WESTON did not collect any groundwater samples as part of this effort. As part of the monitoring well installation in 1984, soil borings were drilled at the site. The borings indicated low permeability silty clays to 50 feet below grade. No groundwater uses, domestic or industrial, were documented within a 1-mile radius of the site. The factors that most influenced the groundwater pathway Phase III score are as follows:

- LDOT information stating that there is no groundwater use within 1 mile of the site.

- The lack of analytical data to determine a release of hazardous wastes to groundwater in the vicinity of the site.

- The low permeability of the clay soils at the site.

Surface Water Pathway

The laboratory analytical results for sediment samples SED-4 through SED-7 collected during the SIP can be used to characterize the potential for contaminant migration in the surface water pathway. A drainage ditch runs along the west and south ends of Pits 1 through 3. An overflow pipe on Pit 2 drains rainwater from the pit into the ditch. Surface water draining from the pits follows the ditch approximately 0.3 mile until reaching the probable point of entry (PPE) at Bayou La Carpe. Bayou La Carpe flows approximately 4,000 feet south until reaching the Houma Navigational Canal. The Houma Navigational Canal is tidally influenced. Due to the tidal influence, two TDLs are assigned to the site, TDL-1 and TDL-2. TDL-1 is located approximately 2.55 miles upstream of the PPE at the water plant, the farthest point where saltwater intrusion has been documented. TDL-2 is located 15 miles downstream in the Houma Navigational Canal.

The Houma Water Plant is located at the confluence of Bayou Black and the Houma Navigational Canal, approximately 2.55 miles upstream of the site. Bryan Sampey, plant manager of the Houma Water Plant, stated that when saltwater intrusion becomes a problem at the surface water intake, the plant switches to Bayou Black for a water supply. The saltwater encroachment is typically seasonal. The plant reportedly serves 30,000 residents in the surrounding area. According to Gerald Adkins of LDWF, Bayou La Carpe and the Houma Navigational Canal are considered limited fisheries because of saltwater intrusion and marine traffic.

Sediment samples collected from the drainage ditch surrounding Pits 1 through 3 indicate the presence of several semivolatile organics and metals. Sediment analytical results reported at concentrations exceeding three times background concentrations are summarized in Attachment 3, Tables 2 and 3. A Surface Water Pathway Map is provided in Attachment 1 as Figure 5.

Soil Exposure Pathway

The site is situated near a residential area and is accessible to the public; however, there are no residences within 200 feet of on-site contamination. The site serves as an industrial park and has little or no recreational value. EBI maintains 20 workers on-site. The residents of Houma living within 1 mile of the site were scored as nearby individuals. The most important factors considered for the soil exposure pathway are as follows:

- The pits are accessible and there is a residential population within the nearby vicinity. However, no recreational activities were documented on-site.

- Several on-site workers are present in the industrial park.